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- (B) identifying in a progeny of at least one of said pairs of inter-breeding reference humans the single nucleotide present at a single nucleotide polymorphic site of a corresponding allele of said alleles (i) and (i'), and the single nucleotide present at a single nucleotide polymorphic site of a corresponding allele of said alleles (ii) and (ii'); and
- (C) determining the extent of genetic linkage between said alleles (i) and (ii), to thereby create said a genetic map.

46. The method of claim 45, wherein said steps (A), (B), and (C) are repeated at least once in cycle, to thereby create a genetic map having more than two polymorphic sites. --

## REMARKS

### I. The Status of the Claims

Applicants have canceled claims 1-29, and have added new claims 32-46 to the application. These claims are directed to the embodiments in which the single nucleotide polymorphisms of the present invention are single nucleotide polymorphisms of humans.

Support for this amendment can be found *inter alia* at page 4, lines 1-16, page 13, lines 23-26, page 42, lines 21-26, and at pages 58-60. No new matter has been added by the above amendments, which are fully supported by the original specification.

### II. The Requirement for Restriction

The Examiner has indicated that the present specification, as originally filed, contained claims to five separate and distinct inventions. Accordingly, the Examiner has issued a requirement for Restriction. Applicants herewith elect the invention of claims 30 and 31 (Group V), and partially traverse the restriction requirement. Reconsideration of the restriction requirement is respectfully requested.

Applicants respectfully draw the Examiner's attention to the fact that the claims of Groups II, III, IV and V are all classified in the same class and subclass, and are thus not separate and distinct inventions from one another. Despite such concordance of class and subclass, the Examiner has indicated that restriction between such Groups is proper because the claims comprise different method steps. The Examiner is respectfully requested to reconsider such restriction requirement.

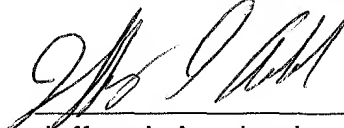
In response to the restriction requirement, Applicants have canceled claims 1-8 (as directed to a different class and subclass from that of all other claims). Applicants have moreover attempted to ensure that all of the newly presented claims comprise the same method as recited in claims 30 and 31. Accordingly, Applicants submit that examination of claims 30-46 would be proper in this application.

In the event that the Examiner concludes that claims 30-46 embrace more than one separate and distinct invention, Applicants, as stated above, affirm their election of the invention of Group V (claims 30 and 31), and request that the Examiner issue an initial action directed to such of the pending claims as the Examiner concludes are directed to that invention.

In view of Applicants' amendments and remarks, it is submitted that the present application is now in condition for examination, and early notice of favorable action is respectfully requested.

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Respectfully Submitted,

  
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